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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,213	08/21/2003	Francoise Le Bolzer	PF020102	7240
24498	7590	01/21/2005	EXAMINER	
CHEN, SHIH CHAO				
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/645,213	LE BOLZER ET AL.	
Examiner	Art Unit		
Shih-Chao Chen	2821		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 21 August 2003.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-4 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-4 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 21 August 2003 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/21/03

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_.

**DETAILED ACTION**

***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet.

2. The abstract of the disclosure is objected to because they include reference characters which are not enclosed within parentheses. Correction is required. See MPEP § 608.01(b).

3. The abstract of the disclosure is objected to because "Fig. 1" should be deleted in the Abstract. Correction is required. See MPEP § 608.01(b).

***Drawings***

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the resonator is fed via a feedline made on the face carrying the resonator must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

5. Claim 1 is objected to because of the following informalities: in line 1, "Wideband antenna" should be changed to --A wideband antenna--. Appropriate correction is required.
6. Claim 1 is objected to because of the following informalities: in line 5, "the dielectric of the resonator" should be changed to --the dielectric resonator--. Appropriate correction is required.
7. Claims 2-4 are objected to because of the following informalities: in line 1, "Antenna" should be changed to --The antenna--. Appropriate correction is required.
8. Claim 2 is objected to because of the following informalities: in line 3, "an earth plane" should be changed to --the earth plane--. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
  - A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Mongia et al. (IEEE, VOL 45, NO. 9, September 1997).

Regarding claim 1, Mongia et al. teaches in figures 4-5 a wideband antenna consisting of a dielectric resonator [DRA] mounted on a substrate with an earth plane (See pp.1351 and Fig. 4), wherein the dielectric resonator [DRA] is positioned at a distance  $x$  from at least one of the edges of the earth plane,  $x$  being chosen such that  $0 \leq x \leq \lambda_{\text{diel}}/2$  (See pp. 1354 and Fig. 4), with  $\lambda_{\text{diel}}$  the wavelength defined in the dielectric resonator.

Regarding claim 2, Mongia et al. teaches in figures 4-5 the antenna according to Claim 1, wherein the substrate with an earth plane consists of an element of dielectric material at least one face of which is metallized and constitutes the earth plane (See Fig. 4-5).

Regarding claim 3, Mongia et al. teaches in figures 4-5 the antenna according to Claim 2, wherein the face carrying the resonator [DRA] is metallized, and the resonator is fed by coupling through a slot made in the metallization by a feedline [MICROSTRIP LINE] made on the opposite face (See Fig. 3).

Regarding claim 4, Mongia et al. teaches in figures 4-5 the antenna according to Claim 2, wherein the face opposite the face carrying the resonator [DRA] is metallized [GROUND PLANE] and the resonator is fed via a feedline made on the face carrying the resonator (See Fig. 5).

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-Chao Chen whose telephone number is (571) 272-1819. The examiner can normally be reached on Monday-Friday from 7 AM to 4:30 PM, First Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*shih-chao chen*  
Shih-Chao Chen  
Primary Examiner  
Art Unit 2821

SXC  
January 10, 2005